

REMARKS

1. Applicant thanks the Examiner for the Examiner's comments, which have greatly assisted Applicant in responding.

2. Drawings.

(a) The Examiner stated that the drawings are objected to because they do not include the reference sign mentioned in the description: reference 599 on page 23, line 11.

Applicant has amended the Specification to correct the reference number 599 to 699. Support can be found in Fig. 6, wherein reference number 699 refers to the step of the processor assembling the object and the object sent to a graphics card and being displayed.

Accordingly, Applicant respectfully requests that the Examiner withdraw the objection.

(b) The Examiner stated that the drawings are objected to because they include reference signs not mentioned in the description: Fig. 1, reference 100 and Fig. 6, reference 699.

Applicant has amended the Specification by adding reference number 100 to refer to the receiver of the claimed invention. Support can be found in the Specification on page 8, line 3, as follows:

Fig. 1 shows a schematic drawing of a receiver.

Fig. 6, 699 was addressed above.

Accordingly, Applicant respectfully requests that the Examiner withdraw the objection.

(c) Applicant is submitting a corrected Fig. 3. Please replace "UPD" with the correction -- UDP -- .

Support is found in Claim 35.

Support can further be found in the Specification on page 10, lines 19-21, as follows (emphasis added):

The locator table gives sufficient information for any **packet** belonging to the object to be identified and retrieved.

And, support can further be found in the Specification on page 11, lines 6-8, as follows (emphasis added):

In an alternative embodiment, the Low-level Data Object Locator Table can include a protocol field to allow for addressing of object across **multiple protocols**, ...

3. Specification.

(a) The Examiner objected to Claim 38 because 'claim 6' of Claim 38 should be 'claim 16'.

Applicant respectfully disagrees. Applicant has amended the 'claim 6' part of Claim 38 to 'claim 37'. Support is found on page 14, lines 3-8 and page 18 (line 20) through page 21 (line 14). Please note that under the section, *Obtaining the First-level Name Table and Data Object Locator Table*, starting on page 19, that on page 21, lines 13-14 read:

In a preferred embodiment, there is a Root Object Locator Table that can be obtained in a manner similar to that of the Data Object Locator Table.

Applicant respectfully requests that the Examiner therefore remove the objection to Claim 38 as amended.

(b) The Examiner objected to the disclosure because on page 13, line 12 'transmitted formatted' is a grammatical error.

Applicant respectfully disagrees.

The entire sentence in which 'transmitted formatted' resides follows (emphasis added):

In a preferred embodiment, a data object can be transmitted **formatted as an MPEG table**.

Applicant points out that 'formatted as an MPEG table' is a phrase which qualifies the verb, transmitted. Applicant understands that a comma after the word, transmitted, would have been helpful. However, the sentence is not grammatically incorrect.

Therefore, Applicant respectfully requests that the Examiner withdraw the object to the disclosure.

4. 35 U.S.C. § 112.

The Examiner rejected Claim 35 under 35 U.S.C. § 112, first paragraph, as containing matter which was not described in the specification, and that, specifically, within Claim 35 on page 33, line 11 'UDP packet' is not defined in the specification.

Applicant respectfully disagrees. Support can be found in the Specification on page 10, lines 19-21, as follows (emphasis added):

The locator table gives sufficient information for any **packet** belonging to the object to be identified and retrieved.

Support can also be found in the Specification on page 11, lines 6-8, as follows (emphasis added):

In an alternative embodiment, the Low-level Data Object Locator Table can include a protocol field to allow for addressing of object across **multiple protocols, ...**

Support can further be found in corrected Fig. 3, last column, '**UDP Port Number**'.

According, in view of the above, Applicant requests that the Examiner withdraw the rejection of Claim 35.

5. **35 U.S.C. § 102(e).**

Claim 37

The Examiner rejected Claim 37 as being unpatentable by Davis *et al*, US 5,918,229 (Davis). Specifically, the Examiner states that Davis teaches a memory data structure (col. 3, lines 20-21) including a First-level Name Table; and a data object locator table (col. 2, lines 21-23 and col. 4, lines 39-42).

Applicant respectfully disagrees.

The First-level Name Table and the data object locator table of the claimed invention are clearly defined. Support is shown at least in Figs. 2 and 3. The claimed invention uses the First-level Name Table and the data object locator table to obtain object data, provide such object data to a processor, which then assembles the object. (Support is further found in Fig. 6.)

Applicant respectfully points out that Davis does not teach such features and related processing. That is, Davis does not **teach using a First-level Name Table and a data object locator table for obtaining object data, providing such object data to a processor, which then assembles the object.** Davis **could not assemble** as taught in the claimed invention.

Furthermore, in (col. 2, lines 21-23 and col. 4, lines 39-42), Davis teaches a directory structure and stored (portions of) data, which is at least opposed to a locator table comprising information such as number of times an data object is sent, etc.

In stark contrast, the claimed invention does not require such (portions of) data be stored. Support is found in the Specification on page 18, lines 2-18; and on page 24, line 13-20 and page 25, lines 1-3, wherein the receiver looks up non-stored information upon a user request.

According, in view of the above, Applicant submits that Claim 37 and its dependent claims are distinguished from the prior art of record. Therefore, Applicant requests that the Examiner withdraw the rejection of Claim 37 and its dependent claims.

6. 35 U.S.C. § 103(a).

The Examiner rejected Claims 1-4, 8-13, 15-18, 19-23, 25-34, 37-40, and 42-55 as being unpatentable over US 5,973,681 to Tanigawa *et al* (Tanigawa) in view of Davis.

Claim 1 and its dependent claims

Specifically, the Examiner states that Tanigawa teaches a method for receiving data (col. 5, line 65) over a broad cast medium (col. 1, lines 11-12), comprising the steps of: said desired data object being associated with a first-level name; obtaining a plurality of second-level names associated with said first-level name, said plurality of second-level names being associated with a plurality of low-level data to objects constituting a portion of said desired data object; for each one of said plurality of second-level names, performing the steps of: obtaining location information associated with the second-level name; and obtaining data associated with the low-level data object associated with said each one of said plurality of second-level names responsive to said location information (col. 2, lines 24-29).

Applicant respectfully disagrees.

Col. 2, lines 23-29 follows (emphasis follows):

... using a broadcast wave, including: **a first storage unit** for storing a plurality of **frames** of image data; a second storage unit for storing control information which shows **links between** the plurality of **frames** of image data stored **in the first storage unit**, and which indicates a combining of a supplementary design with the **image data stored in the first storage unit**,
...

Applicant points out the Tanigawa is simply sending the desired data object in the broadcast wave in the first storage unit. Nowhere does Tanigawa teach or suggest the steps above. Specifically, nowhere does Tanigawa teach or suggest
:

said desired data object being associated with a first-level name;
obtaining a plurality of second-level names associated with said first-level name;
said plurality of second-level names being associated with a plurality of low-level data to objects constituting a portion of said desired data object; and
for each one of said plurality of second-level names, performing the steps of:
obtaining location information associated with the second-level name; and

obtaining data associated with the low-level data object associated with said each one of said plurality of second-level names responsive to said location information.

Using the features and steps of the claimed invention cited above, the claimed invention can, whereas Tanigawa cannot : enable a user to address spectrum that is carried on channels other than the one his receiver is tuned to (refer to the Specification on page 6, lines 12-13); and use low-level objects and organize data and data references in a multi-level design (refer to the Specification on page 7, lines 6-7).

Furthermore, Tanigawa does not teach or suggest information about low-level objects that is independent of the request object. Also, in the claimed invention, there is an entry for each data object by second-level name, which is not taught by Tanigawa.

In contrast to Tanigawa, the claimed invention comprises each entry having the physical location where the data object can be found.

Support can be found in the section *Low-level data object Locator Table* on page 18, lines 2-22 and page 19, lines 1-2.

Therefore, in view of the above Tanigawa does not teach such cited features of the claimed invention. Hence, neither Tanigawa nor Davis either alone or in

combination teach the claimed invention. Therefore, Applicant submits that Claim 1 and its independent claims are distinguished from the prior art of record.

According, in view of the above, Applicant respectfully submits that the Examiner withdraw the rejection of Claim 1 and its dependent claims.

Claim 22 and its dependent claims

The Examiner stated that Tanigawa teaches comprising the steps of said desired object being associated with a first-level name; looking up said first-level name in a First-level Name Table; obtaining a plurality of second-level names associated with said first-level name responsive to the step of looking, and for each one of said plurality of second-level names so obtained, performing the steps of looking up each said second-level name in a Low-level Data Object Locator Table, obtaining location information associated with said each said second-level name, obtaining data responsive to said location.

The Examiner cites as support col. 2, lines 24-29.

Applicant respectfully disagrees.

In view of the arguments above, Applicant respectfully points out that Tanigawa does not teach or suggest such steps or apparatus performing such steps. Therefore, does not teach or suggest the claimed invention. Therefore, Applicant

submits that Claim 22 and its independent claims are distinguished from the prior art of record.

According, in view of the above, Applicant respectfully submits that the Examiner withdraw the rejection of Claim 22 and its dependent claims.

Claims 31, 39, 48, 49-55, and their respective dependent claims

Applicant is of the opinion that the Examiner rejected the claims under a similar rationale. To wit, the Examiner cited col. 2, lines 24-29 as support.

Applicant is of the opinion that in view of the arguments above, Tanigawa does not teach or suggest the claimed invention. Therefore, the claimed invention is distinguished over the prior art of record.

Accordingly, Applicant respectfully requests the Examiner to withdraw the rejection of Claims 31, 39, 48, 49-55, and their respective dependent claims.

Claim 36

The Examiner stated that Boon teaches a plurality of integers, each of said plurality of integers being associated with a second-level name, each of said second-level name being associated with a low-level data object, said plurality of second-level names composing said data object (col. 13, lines 40-50).

Applicant respectfully disagrees.

Col. 13, lines 40-50 simply states that “numerical values of object identifiers ... are described in the left-side column ... and Internet names and remote paths ... showing locational information ... of relevant data of the respective objects ... are described in the right-side column.

In start contrast, the claimed invention teaches a first-level name, associated with second-level names, associated with locations, associated with low-level objects, which constitute a portion of an object. Boon does not teach such features.

Boon is simply teaching pointing to ‘relevant’ data, and is not teaching the method and related apparatus for broadcasting data in an efficient and novel way as by the claimed invention.

The claimed invention assembles the low-level objects into the (portions of) desired object. With the teachings of Boon, as suggested by the Examiner regarding Claim 36, neither Tanigawa, Davis, nor Boon alone or in combination would be able to obtain the desired object when organized and broadcasted as per the claimed invention.

Therefore, Applicant is of the opinion that Claim 36 is in allowable condition. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of Claim 36.

CONCLUSION

Based on the foregoing, Applicant considers the claimed invention to be distinguished from the art of record. Accordingly, Applicant earnestly solicits the Examiner's withdrawal of the objections and rejections raised in the above referenced Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States patent.

Respectfully Submitted,



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MARKED UP VERSION SHOWING CHANGES MADE

In the Drawings

In Fig. 3, please replace “UPD” with -- UDP – as shown in the submitted replacement Fig. 3.



In the Specification

On page 23, line 11, please replace "599" with -- 699 --.

Marked up copy of page 23, lines 9-13 follows:

In a preferred embodiment, the processor 130 assembles the data into the desired data object, as known in the art. In a preferred embodiment, the data is displayed 170 by running it through a graphics card 160, [599]699. In an alternative embodiment, the data need not be displayed. For instance, the data may be a text file or data that is to be stored or manipulated by the processor.

On page 11, line 17, after "enhanced TV receiver" , please add -- 100 --.

Marked up copy of page 11, lines 16-22 and page 12, line 1, as follows:

FIG. 1 is a schematic drawing of one embodiment of a broadcast data / enhanced TV receiver 100. The receiver includes a tuner 120 that receives input through an input interface 110. The tuner 120 is coupled to a processor 130 and an MPEG demodulator 140. A memory 135, storage unit 137, and removable media 138 can be coupled to the processor 130. The removable media can contain functional information 139. The MPEG demodulator 140 is coupled to a Video-Audio processing card 150, which is coupled to a display unit 170. The

processor 130 is couple to a graphics card 160, which is coupled to a display unit 170.

In the Claims

Please amend Claim 38 as follows (Marked up Copy):

38. The data structure of claim [6]37, further including a root object locator table.